

May 1999

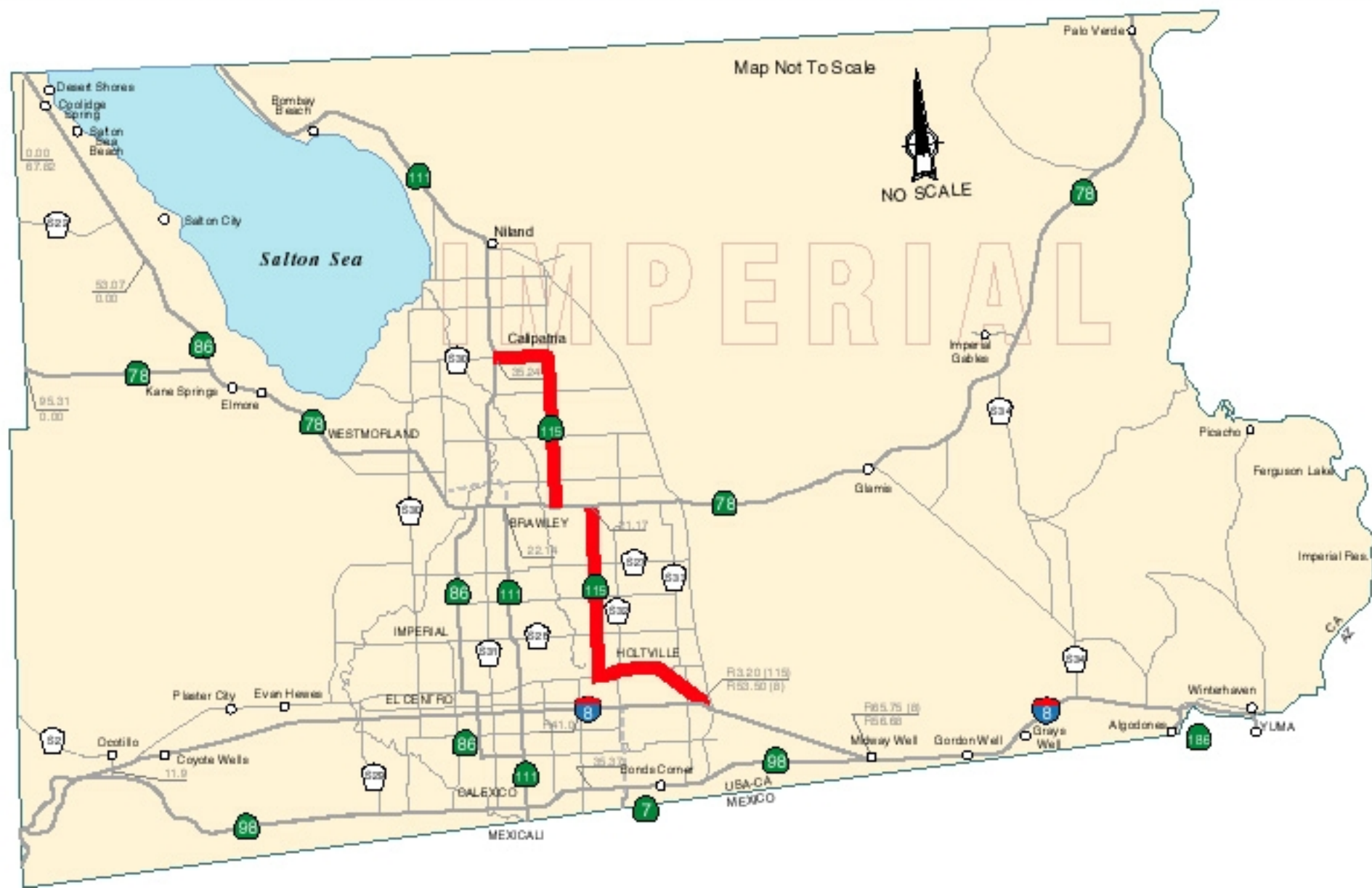


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TRANSPORTATION CONCEPT SUMMARY

STATE ROUTE 115 (SR-115)

11-IMP-115 P.M. R3.2 - 35.2

The Transportation Concept Report (TCR) is a planning document which describes the Department's basic approach to the development of a given corridor. Considering reasonable financial constraints and projected travel demand, this TCR establishes a 20 year transportation planning concept for State Route 115 (SR-115) and identifies modal transportation options needed to achieve the concept. The concept considers operating levels of service (LOS), modal improvements, and new technologies. The TCR also considers potential long term needs for the corridor beyond the 20 year planning period. The long term needs focus on the Post-2020 Ultimate Transportation Corridor (UTC).

The TCR is a preliminary planning phase that leads to subsequent programming and the project development process. Specific proposed nature of improvements (i.e., number of lanes, access control, etc.) may change in later project development stages, with final determinations made during the project study report (PSR), project report (PR) or design phases.

Each TCR must be viewed as an integral part of a planned system. The TCR is based on the completion of the 20 year system. The system has been developed to meet anticipated travel demand generated from regional growth forecasts. Removal of any portion of a route from the system will adversely affect travel on parallel or intersecting routes.

The TCR is prepared by Caltrans District 11 staff in cooperation with local and regional agencies. The TCR is updated as necessary as conditions change or new information is obtained.

The focus of the TCR is the 2020 Transportation Concept, which includes State highway, transit, system management and travel reduction, goods movement, international border, aviation and nonmotorized components.

ROUTE DESCRIPTION

SR-115 is entirely within rural Imperial County extending from Interstate-8 (I-8) through Holtville to the junction of SR-111 in Calipatria. Post mile values for SR-115 begin at R3.2 due to adoption of a realignment southeast of Holtville. There are also equations resulting in overlapping post miles. This overlap accounts for an additional 2.6 kilometers (1.6 miles), bringing the total route length to 54.1 kilometers (33.6 miles). The route traverses flat terrain for its entire length.

Purpose of Route

SR-115 primarily serves interregional automobile and commercial vehicular traffic, farm vehicles, and agricultural trucking from producers to processing and distribution centers. SR-115 also carries some international traffic and serves intraregional travel between the

cities of Holtville, Brawley and Calipatria.

The existing facility type and operating conditions for SR-115 are shown in Table S-1.

**TABLE S-1
EXISTING FACILITY TYPE AND OPERATING CONDITIONS**

Segment/ County Post-Mile	Location	No. Lanes/ Facility Type	ADT	Peak Hour V/C Ratio	Peak Hour Operating LOS*	U/R
1 IMP R3.2 - R9.3	I-8 to Grape Avenue	2C	1,400	.08	B	R
2. IMP R9.3 - L9.8	Grape Avenue to Holt Road	4C	5,400	.10	B	R
3 IMP L9.8 - L11.4	Holt Road to Evan Hewes Highway.	2C**	6,400	.31	C	R
4 IMP L11.4 - 21.2	Evan Hewes Hwy. to East Junction SR-78	2C	1,900	.09	B	R
5 IMP 21.2 - 31.6	West Junction SR-78 to Wirt Road	2C	1,600	.13	B	R
6 IMP 31.6 - 35.2	Wirt Road to Jct. SR-111	2C***	2,000	.09	B	R

2C = Two lane conventional highway

4C = Four lane conventional highway

ADT = Average Daily Traffic

LOS = Level of Service

R = Rural

U = Urban.

V/C = Volume to Capacity

* Peak Hour Operating LOS includes provision of State highway and arterial improvements

**4C from P.M.IMP. L9.8 to L10.1, and P.M.IMP. L10.6 to L10.9

***4C from P.M. IMP.34.5 to P.M. IMP. 35.2

2020 Transportation Concept Facility Improvements

Table S-2 shows highway improvements to SR-115 that are part of 2020 Transportation Concept. The Peak Hour V/C ratio and Peak Hour Operating LOS assume completion of the proposed highway improvements.

**TABLE S-2
2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS**

Segment/ County Post-Mile	Location	Improvement Description	Peak Hour V/C Ratio	Peak Hour Operating LOS	Concept LOS
Segment and PM undetermined	I-8 to Evan Hewes Highway	Construct 4E on new alignment	0.16	A	D
4. IMP L11.4-21.2	Evan Hewes Hwy. to East Junction SR-78	Upgrade 2C to 4E	.05-.27	A	D
4A IMP 21.2- undetermined	East Jct. SR-78 to Brawley Bypass/SR-111	Upgrade SR-115 from SR-78 and provide four lane expressway connection to the Brawley Bypass	0.12	A	D
5 IMP 23.0(est.)-31.6	Shank Road to Wirt Road	Upgrade SR-115 to a four lane conventional highway from new connection with the Brawley Bypass to Wirt Road	.15	B	D
6 IMP 31.6 -35.2	Wirt Road to SR-111	Upgrade SR-115 to a four lane conventional highway from Wirt Road to SR-111 in Calipatria	.14	B	D

2C = Two lane conventional highway

4E = Four lane expressway

LOS = Level of Service

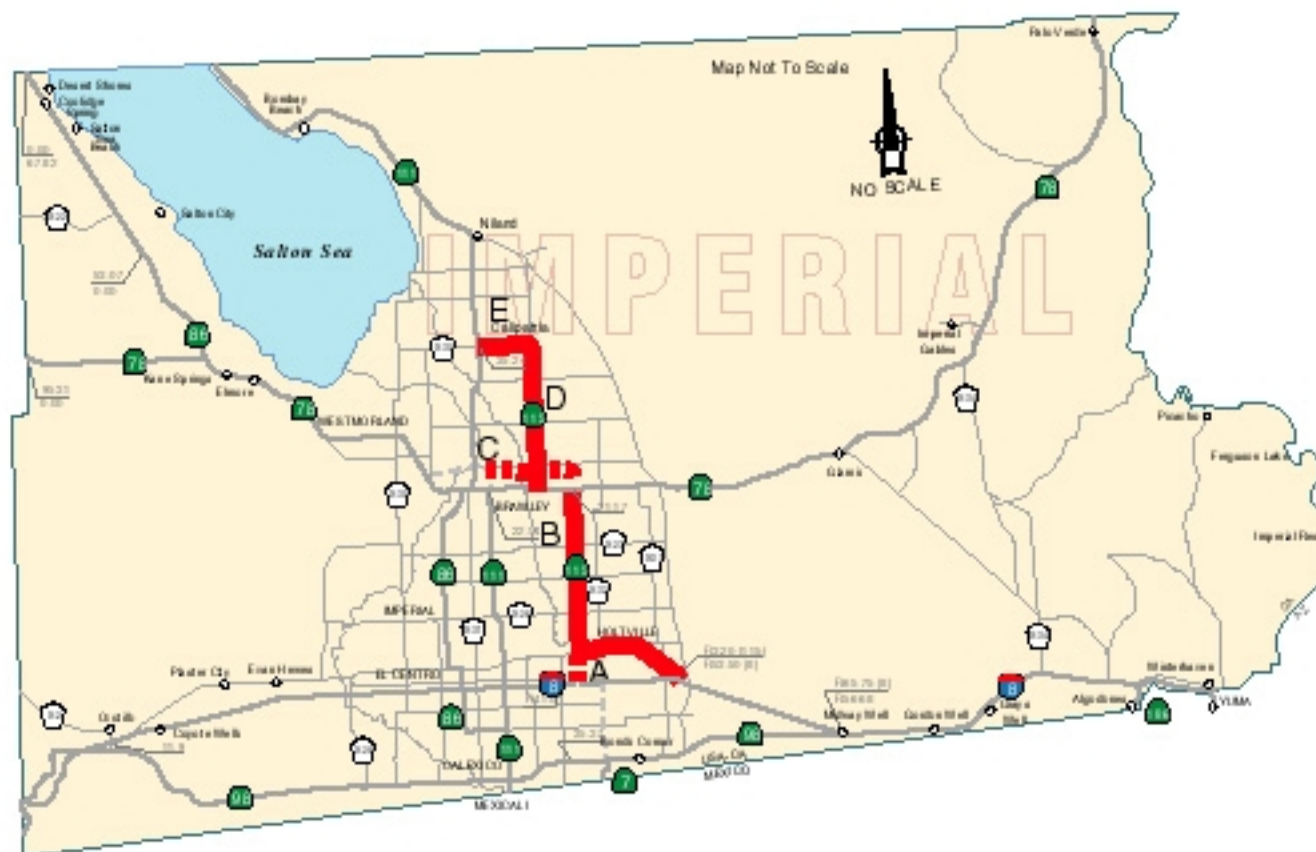
V/C = Volume to Capacity

*Concept LOS is based on District 11 System Planning LOS Guidelines

SR-115 TRANSPORTATION CONCEPT IMPROVEMENTS

DISTRICT 11 - System Planning

May 1999



MAP REFERENCE	LOCATION	IMPROVEMENT	PEAK HOUR V/C RATIO	PK.HR. OP. LOS	CONCEPT LOS
A	I-8 To Evan Hewes Hwy.	Construct 4E	0.16	A	D
B	Evan Hewes to SR-78	Upgrade 2C to 4E	0.05 -0.27	A	D
C	SR-78 to Brawley Bypass	New 4E connection to Brawley Bypass	0.12	A	D
D	Shank Road to Wirt Road	Upgrade 2C to 4C	0.15	B	D
E	Wirt Road to SR-111	Upgrade 2C to 4C	0.14	B	D

INTRODUCTION AND STATEMENT OF PLANNING INTENT

The system planning process consists of three products: the District System Management Plan (DSMP), the Transportation System Development Plan (TSDP), and TCR.

The DSMP describes how the District intends to maintain, manage, and improve the District transportation system over the next 20 years. The DSMP is developed in partnership with regional and local transportation planning agencies. The DSMP summarizes 20 year planning concepts and proposed transportation improvements on a system wide level, and influences the development of future transportation concepts and development plans. It integrates land use, modal opportunities, regional arterial plans, transportation system management, transportation demand management, highway system improvements, and the District highway network into a comprehensive transportation program. The DSMP serves as the foundation for the TSDP and the TCRs.

The TSDP is an internal Caltrans system planning document. Its purpose is to identify, by district, a reasonable and effective list of multimodal transportation projects (infrastructure/capital outlay) and strategies, and demand and system management options to improve statewide, interregional and regional mobility and intermodal transfer of people and goods. It includes both a Recommended Plan and a Cost Constrained Plan component, and categorizes improvements into two time frames, 2001-2015 and post-2015. It is based on analysis of current and projected future travel demand. The TSDP replaces the District 11 Route Development Plan.

The TSDP broadens the Department's assessment of mobility options at a preliminary planning stage. It expands system planning from an analysis of state highway route deficiencies to an integrated intermodal and multimodal analysis of travel corridors. The TSDP applies the principles, practices, and concepts of the Advanced Transportation System Development (ATSD) program to system planning.

Improvements, strategies, and system management options identified in the TSDP will be Caltrans "candidates" for further detailed examination in state, metropolitan, regional or local studies and processes. The TSDP is also the Department's initial identification of areas under consideration for corridor studies with local agencies and rail/transit operators.

The TCR process was discussed in the Transportation Concept Summary.

ROUTE DESCRIPTION

SR-115 is entirely within rural Imperial County extending from I-8 through Holtville to the junction of SR-111 in Calipatria. Post mile values for SR-115 begin at R3.2 due to adoption of a realignment southeast of Holtville. There are also equations resulting in overlapping post miles. This overlap accounts for an additional 2.6 kilometers (1.6 miles), bringing the total route length to 54.1 kilometers (33.6 miles). The route traverses flat terrain for its

entire length.

Purpose of Route

SR-115 primarily serves interregional automobile and commercial vehicular traffic, farm vehicles, and agricultural trucking from producers to processing and distribution centers. SR-115 also carries some international traffic and serves intraregional travel between the cities of Holtville, Brawley and Calipatria.

Existing Facility Classifications

The federal functional classification of SR-115 is Rural Major Collector.

California Senate Bill 300, enacted in 1989, created an Interregional Road System (IRRS). Subsequently, Section 164.3 of the California Streets and Highways Code directed Caltrans to develop and submit to the Legislature an IRRS Plan by February 1, 1990. In accordance with this plan, the IRRS is a series of interregional state highway routes outside the urbanized areas that provides access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions. SR-115 is not part of the Interregional Road System.

The National Highway System (NHS) Designation Act of 1995 was enacted by Congress in November, 1995. The purpose of the NHS is to provide an integrated national highway system that serves both urban and rural America; to connect major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; to meet national defense requirements; and to serve interstate and interregional travel. The new NHS includes the Interstate System routes. In Caltrans District 11, the NHS totals 789.0 km (490.3 miles). SR-115 is not included in the NHS.

SR-115 is a designated State Highway Terminal Access Route connecting to the National Truck Network as per the Surface Transportation Assistance Act (STAA), a route system federally designated for use by larger trucks.

To emphasize corridors that are most essential to the California economy in terms of national and international trade, a transportation network known as the Intermodal Corridors of Economic Significance (ICES) has been developed by Caltrans. To be included in the ICES system, a route should provide access between major freight intermodal facilities and serve freight traffic with the North American Free Trade Agreement (NAFTA) countries of Canada and Mexico, as well as the Pacific Rim and other U.S. trade markets. The route should carry high interstate and international freight volumes and value important to the economy of California. SR-115 is not included in the ICES system.

The Caltrans District 11 designated International Border Trade Corridor (IBTC) system consists of transportation corridors which link ports of entry and international border regions to the existing transportation system. These corridors will be the principle conduits for movement of people and goods as the overall demand for transportation increases in and out of California and the United States. SR-115 is not included in the IBTC system.

SR-115 is not included on the Master Plan of State Highways Eligible for Official Scenic Highway Designation.

For maintenance programming purposes, the State Highway System has been classified as Class 1, 2, and 3 highways based on the Maintenance Service Level (MSL) descriptive definitions:

MSL 1 contains route segments in urban areas functionally classified as Interstate, Other Freeway/ Expressway, or Other Principal Arterial. In rural areas, the MSL 1 designation contains route segments functionally classified as Interstate or Other Principal Arterial.

MSL 2 contains route segments classified as an Other Freeway/Expressway or Other Principal Arterial not in MSL 1, and route segments functionally classified as minor arterials not in MSL 3.

MSL 3 indicates a route or route segment with the lowest maintenance priority. Typically, MSL 3 contains route segments functionally classified as major or minor collectors and local roads, route segments with relatively low traffic volumes, and route segments being considered for relinquishment, rescission, or where a new alignment will replace the existing facility. Route segments where the District does not anticipate spending money and route segments where route continuity is necessary are also assigned an MSL 3 designation.

All of SR-115 is classified as MSL 3.

Existing Facility

SR-115 is a conventional highway traversing desert and agricultural areas on a flat gradeline. Segments 1, 2, 4 and 5 are a two lane conventional highway and portions of segments 3 and 6 are four lane conventional highways.

A description of the existing facility in a segment specific format is shown in Table 1.

TABLE 1
EXISTING FACILITY GEOMETRICS

Segment	County/ Post Mile	No. Lanes/ Facility Type	Lane Width	Outside Shoulder Width	Inside Shoulder Width	Max. R/W Width	Median Width	Grade Line
1	IMP R3.2/R9.3	2C.	3.0-3.7 (10-12)	8 - 3'	0	80'	0	Flat
2	IMP R9.3/L9.8	2C	3.7 (12)	8'-12'(4-12')	0'(2-5')	70'	0 - 54	Flat
3	IMP L9.8/L11.4	2C/4C*	3.7 (12)	8'-12'(4-12')	0'(2-5')	70'	0 - 54	Flat
4	IMP L11.4/21.2	2C	3.7 (12)	10'	0	70'	0	Flat
5	IMP 21.2 /31.6	2C	3.7 (12)	6'	0	100'	0	Flat
6	IMP 31.6/35.2	2C/4C**	3.7 (12)	6'-14'	0	100'	0	Flat

C = Conventional Highway
R/W - Right of Way

*4C from P.M. IMP. L9.8 to P.M. IMP. L10.1 and P.M. IMP. L10.6 to L10.
**4C from P.M. IMP. 34.5 to P.M. IMP. 35.2

Note: Widths are in meters, followed by feet

Several arterial streets that parallel or intersect SR-115 that could provide alternative routes for travel are listed in Table 2. Some of these streets may not provide an efficient alternative due to out-of-the-way travel and/or physical inadequacies.

TABLE 2
SIGNIFICANT ARTERIAL STREETS IN THE SR-115 CORRIDOR

Segment	Arterial Name	Description	P/I
1,2,3	Interstate 8	Van Der Linden Rd. to Imperial 111	P
1,2,3	Highway 98	West Junction Interstate 8 to Imperial 111	P
4	Worthington Rd. (S-28)	Highline Rd. to Imperial Avenue	I
4	Keystone Rd. (S-86)	Holt Rd. to Dogwood (S-31)	I
4,5	State Route 78	Butters Rd. to Forrester Road S-30	I

P = Parallel
I = Intersect

The Imperial County Transit System provides county wide transit service. The system serves a variety of rural communities and towns such as Calipatria, Niland, Brawley, Holtville, Calexico and El Centro. It provides both weekday and more limited Saturday service. Greyhound Trailways provides interregional bus service between Los Angeles, San Diego, Phoenix and El Paso. Greyhound stops in Calexico at least three times daily. Golden State Bus Lines and a Mexico carrier, Transportes InterCalifornia serve Calexico and Mexicali.

ROUTE ANALYSIS

This section includes a land use/corridor growth and demographic analysis for existing and future conditions in the SR-115 corridor.

Corridor Growth and Demographics

The seven incorporated cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland account for three quarters of the total population of Imperial County. However, as more Specific Plan Areas (SPAs) are developed, the unincorporated areas are projected to have a 339 percent increase in population from 1990 to 2020, while the incorporated cities are expected to grow 96 percent in the same time period. A 158 percent increase in housing stock and a 95 percent growth in employment is projected for Imperial County by 2020.

Mexicali is also expected to increase in population. Assuming a 2.6% annual growth rate (as observed between 1990 and 1995), it is estimated that Mexicali's population will grow to at least 1.3 million people.

Imperial County is one of the most productive agricultural regions in the world. Since irrigation water was introduced in 1901, agriculture has been the single most important economic activity of Imperial County. Agriculture and its related industries employs 35 percent of the work force. Government is the second largest employer with 21 percent, followed by retail trade with 15 percent. Other significant contributors to the economy include winter visitors, State of California prisons near Calipatria and Seeley, the growing geothermal industry, mining, the second Mexico/USA border crossing at Calexico, and increased trade as a result of the North American Free Trade Agreement (NAFTA).

In addition to the agricultural areas, Imperial County possesses some very popular recreational activities. The Salton Sea has year-round fishing. There is seasonal hunting of quail, duck, pheasant, chukar, geese and dove throughout the Valley. Minerals and fossils lie exposed throughout the Valley, bringing many hikers, collectors and enthusiasts. There is also the Anza-Borrego Desert State Park, the Imperial Sand Dunes, the Colorado River, and access to the Gulf of California.

Table 3 shows population, housing and employment growth forecasts for the County of Imperial and the cities of Calipatria and Holtville.

**TABLE 3
POPULATION, HOUSING AND EMPLOYMENT GROWTH
SELECTED JURISDICTIONS**

Location	Year	Total Population	% Change from Base Year	Total Households	% Change from Base Year	Total Employment	% Change from Base Year
County of Imperial	1990	109,303	0	32,842	0	46,118	0
	2000	148,980	36	42,888	30	62,197	35
	2005	171,772	57	50,437	66	69,157	50
	2010	207,305	90	60,230	83	74,992	63
	2015	240,812	120	71,150	117	82,122	78
	2020	280,341	156	84,560	157	89,880	95
Calipatria	1990	2,690	0	720	0	1,739	0
	2000	5,332	98	948	32	2,557	47
	2005	5,992	123	1,083	50	2,827	63
	2010	7,020	161	1,258	75	3,057	76
	2015	7,990	197	1,455	102	3,338	92
	2020	9,134	240	1,696	136	3,639	109
Holtville	1990	4,820	0	1,422	0	4,800	0
	2000	5,631	17	1,586	12	5,537	15
	2005	5,750	19	1,639	15	5,591	16
	2010	5,935	23	1,705	20	5,519	15
	2015	6,110	27	1,780	25	5,453	14
	2020	6,317	31	1,872	32	5,477	14

Source: SCAG Demographic Forecasts (Adopted April, 1998)

The 1993 Imperial County General Plan Update identifies several SPAs within the county that could have an effect on future operating conditions on SR-115 and other State highway facilities. The intent of the SPA is to ensure that future development occurring within the designated areas is in conformance with the County's General Plan Land Use Element. Any new developments proposed within the SPA must have an approved Specific Plan prior to commencement of development activities. Table 4 lists the SPA's most likely to have an effect on future operating conditions of SR-115.

**TABLE 4
SELECTED IMPERIAL COUNTY SPECIFIC PLAN AREAS**

Imperial County Specific Plan Areas	Type of Development
Tamarack Canyon Ranch SPA	Resort/Recreational
Luckey Ranch SPA	Commercial/Industrial
Mesquite Lake SPA	Light, Medium And Heavy Industrial
Glamis SPA	Commercial/Retail/Services

TRANSPORTATION CONCEPT (2020)

The 2020 Transportation Concept includes the State Highway component, which is comprised of the facility type and the number of lanes for 2020, the ADT for 2020, the peak hour Volume to Capacity (V/C) Ratio for 2020, the peak hour Operating LOS for 2020, and the Transportation Concept LOS for 2020. The 2020 traffic projections for SR-115 are based on Caltrans future traffic projections. The 2020 traffic projections are subject to change based on periodic traffic forecasting model adjustments and ongoing supplemental transportation studies.

The Transportation Concept LOS for SR-115 is LOS "D" and is based on Caltrans' system planning guidelines.

Table 5 shows the specific 2020 Transportation Concept facility type and 2020 Transportation Concept LOS for SR-115. The 2020 Peak Hour Operating LOS is based on Caltrans traffic forecasts.

TABLE 5
2020 TRANSPORTATION CONCEPT

SEGMENT/ COUNTY POST-MILE	LOCATION	NO. LANES/ FACILITY TYPE	ADT	PEAK HOUR V/C RATIO	PEAK HOUR OPERATING LOS*	CONCEPT LOS
1 IMP R3.2 - R9.3	I-8 to Grape Ave.	2C	6,600	0.37	B	D
2 IMP.R9.3 - L9.8	Grape Avenue to Holt Road	4C	13,200	0.29	B	D
3 IMP. L9.8 - L11.4	Holt Road to Evan Hewes Highway.	2C**	10,500	0.48	C	D
IMP	I-8 to Evan Hewes Highway	4E	10,000	0.16	A	D
4 IMP.L11.4 - 21.2	Evan Hewes Highway to East Junction SR-78	4E	2,800-13,800	.05-.27	A	D
4A IMP undetermined	21.2-- East Junction SR-78 to Brawley Bypass/SR-111	4E	7,000	0.12	A	D
5 IMP 23.0 (est)-31.6	Shank Road to Wirt Road	4C	3,100	0.28	B	D
6 IMP 31.6 - 35.2	Wirt to Jct. SR-111	4C***	5,300	0.14	B	D

2C = Two lane conventional highway
4C = Four lane conventional highway
4E = Four lane expressway

ADT = Average Daily Traffic
LOS = Level of Service
V/C = Volume to Capacity

* Peak Hour Operating LOS includes provision of State highway and arterial improvements.

** Existing 4C from P.M. IMP. L9.8 to L10.1, and P.M. IMP. L10.6 to L10.9

*** Existing 4C from P.M. IMP. 34.5 to P.M. IMP. 35.2

NOTE: Further studies are needed to determine if a new segment from I-8 to Evan Hewes Highway should be added to the State Highway System.

CONCEPT RATIONALE

The 2020 Transportation Concept has six components: highway, transit, goods movement, international border, aviation, and non-motorized.

Highway Component

The Highway Element of the 1997 Imperial County Transportation Plan includes a new four lane north/south expressway connecting I-8 to Evan Hewes Highway/SR-115 (PM L11.4). Although this route is shown in the Imperial County Transportation Plan as an extension of SR-7, it may be more feasible to designate the proposed expressway as SR-115 and relinquish the existing east/west portion of SR-115 from I-8 (PM R3.2) to junction Evan Hewes Highway/SR-115 (PM L11.4). For the purposes of this report, this four lane expressway will be included as part of the 2020 Transportation Concept for SR-115. Further studies are needed to determine whether this improvement should be considered part of SR-7 or SR-115.

The 2020 Transportation Concept includes improving SR-115 from Evan Hewes Highway (PM L11.4) to the east junction with SR-78 (PM 21.2). This would upgrade the existing two lane conventional highway to a four lane expressway.

The 2020 Transportation Concept also includes the provision of a new four lane expressway connection from the east junction of SR-78 (PM 21.2) to the easterly end of the future Brawley Bypass near SR-111.

The Concept for the remaining existing portion of SR-115 from approximately Shank Road (PM 23.0 est.) to SR-111 in Calipatria (PM 35.2) calls for upgrading the existing two lane conventional highway to a four lane conventional highway.

All of the aforementioned highway improvements are included in the Highway Element of the 1997 Imperial County Transportation Plan.

Transit Component

Currently, there is no passenger rail service to Calipatria or Holtville or anywhere in Imperial County. However, Imperial County residents can access passenger rail stations in Yuma, Mexicali and Indio.

The California State Legislature has officially designated a commuter rail route referred to as the Los Angeles/Coachella Valley/Calexico Rail Corridor. This corridor was analyzed in depth in a rail corridor study done by Caltrans in March, 1995. The Imperial County Transportation Plan Rail Vision (adopted February, 1998) continued to analyze rail issues. The studies indicated that the future of passenger rail service in Imperial County is dependent upon a variety of factors:

- Determining whether there is a market for passenger rail and if so, can rail compete with bus and air travel
- The selection and implementation of immigration and customs procedures
- The need for expensive rail improvements in both Mexico and the United States when considering Mexico City to Los Angeles travel
- Commitment by the rail authority in Mexico for continued passenger rail service
- Restrictions on operating equipment from foreign countries on U.S. rail lines

Regarding bus transit services, it is expected that the existing systems will continue to operate. Expansion of bus services could occur in the future as population increases and if demand is warranted.

Goods Movement Component

Under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, additional emphasis was placed on the movement of goods in an integrated transportation network. It is essential to identify critical elements within major goods movement corridors in order to develop effective strategies for managing, maintaining and improving transportation system connectivity. Goods movement planning incorporates analysis of impacts on noise, air quality, land use, congestion and safety. Goods movement issues have significant economic impacts on our regional economies.

On June 9, 1998, the President signed into law PL 105-178, the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next six years. TEA-21 builds on the initiatives established in ISTEA and adds some new programs that address traffic safety, economic competitiveness and international trade. These new programs significantly impact goods movement.

SR-115 carries a high volume of commercial vehicle traffic, given that the route serves agricultural farm-to-market truck traffic. Highway improvements to SR-115 will facilitate international and interstate movement of goods.

International Border Component

The advisability of establishing a discretionary international border crossing program and the development of a multimodal assessment of existing and emerging international trade corridors within Canada, Mexico and the United States was required by ISTEA. Because of District 11's geographic location adjacent to the State of Baja California, Mexico, and the passage of NAFTA, it is expected that transportation and trade issues related to the California/Mexico International border will continue to increase in importance.

Improvements to SR-115 could accommodate increased trade due to NAFTA and World Trade Organization (WTO) policies, especially if the proposed four lane expressway from I-8 to Evan Hewes Highway is designated as SR-115.

Aviation Component

Although not immediately adjacent to SR-115, both Holtville and Calipatria have small airports serving general aviation air travel. These facilities may see increased use as population and demand increases.

The Mexicali airport has regularly scheduled passenger jet service, averaging about two or three planes per day.

Non Motorized Component

Bicycle travel is allowed on SR-115.

AIR QUALITY

Air Pollution Control Districts are responsible for developing air quality plans directed at meeting the National Ambient Air Quality Standards (NAAQS) set by the U.S. Environmental Protection Agency (EPA). The NAAQS identify specific pollutants and acceptable pollutant threshold levels for each region. Areas where a pollutant problem exists are classified as “non-attainment” areas. Deadlines for attainment of the NAAQS have been specified in the federal Clean Air Act..

In Imperial County, SR-115 is located within the Salton Sea Air Basin. Air quality planning for Imperial County is administered through the Imperial County Air Pollution Control District (ICAPCD).

The regional emissions from within the Salton Sea Air Basin do not significantly affect the regional air quality in Imperial Valley. The only pollutants for which federal and/or state air quality standards have been exceeded in the ICAPCD area are ozone (O₃) and suspended particulates (PM₁₀). The standards for O₃ are exceeded only a few times a year in Imperial County. PM₁₀ standards are exceeded primarily due to field burning and travel on unpaved roads. Refuse burning in Mexicali, Mexico is an additional factor in the exceedance of PM₁₀ within Imperial County, particularly in the southern portion of the county. The EPA and the Secretaria de Desarrollo Social of Mexico have agreed to bilateral participation in a particulate study of Mexicali and Imperial County. The study will include workshops on emission survey techniques, ambient sampler operation and maintenance, meteorological measurement systems, and particulate pollution modeling techniques.

COMPARISON OF CONCEPTS

This section compares alternative Concepts considered for the 2020 Transportation Concept.

In 1985, the original Route Concept Report (RCR) was based on Caltrans LOS Standards. Table 6 shows a segment by segment comparison between the 1985 RCR and this current updated TCR.

**TABLE 6
COMPARISON OF 2005 AND 2020 CONCEPTS**

1985 Route Concept for 2005		1999 Transportation Concept for 2020	
Segment/ County Post- Mile	No. Lanes/Facility Type/ Concept LOS	Segment/ County Post-Mile	No. Lanes/Facility Type/ Concept LOS
1. IMP R3.2 - 35.2	2C /C	1 IMP R3.2 - R9.3	2C/D
		2 IMP.R9.3 - L9.8	4C/D
		3 IMP. L9.8 - L11.4	2C***/D
		IMP(I-8 to Evan Hewes)	4E/D
		4 IMP.L11.4 - 21.2	4E/D
		4A IMP 21.2-undetermined	4E/D
		5 IMP 23.0 (est) - 31.6	4C/D
		6 IMP 31.6 - 35.2	4C****/D

***4C from P.M. IMP. L9.8 to L10.1, and P.M. IMP. L10.6 to L10.9

****4C from P.M. IMP. 34.5 to P.M. IMP. 35.2

2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Table 7 shows highway improvements to SR-115 that are part of 2020 Transportation Concept. The Peak Hour V/C ratio and Peak Hour Operating LOS assume completion of the proposed highway improvements.

**TABLE 7
2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS**

Segment/ County Post-Mile	Location	Improvement Description	Peak Hour V/C Ratio	Peak Hour Operating LOS	Concept LOS
Segment and PM undetermined	I-8 to Evan Hewes Highway	Construct 4E on new alignment	0.16	A	D
4. IMP L11.4 -21.2	Evan Hewes Hwy. to East Junction SR-78	Upgrade 2C to 4E	.05-.27	A	D
4A IMP 21.2- undetermined	East Jct. SR-78 to Brawley Bypass/SR-111	Upgrade SR-115 from SR-78 and provide four lane expressway connection to the Brawley Bypass	0.12	A	D
5 IMP 23.0(est.)-31.6	Shank Road to Wirt Road	Upgrade SR-115 to a four lane conventional highway from new connection with the Brawley Bypass to Wirt Road	.15	B	D
6 IMP 31.6 -35.2	Wirt Road to SR-111	Upgrade SR-115 to a four lane conventional highway from Wirt Road to SR-111 in Calipatria	.14	B	D

2C = Two lane conventional highway

4E = Four lane expressway

LOS = Level of Service

V/C = Volume to Capacity

POST-2020 ULTIMATE TRANSPORTATION CORRIDOR

The post-2020 Ultimate Transportation Corridor (UTC) describes the long term (beyond the 20 year planning period) right of way requirements for a particular segment. The long term needs are determined by Advanced Transportation System Development (ATSD) activities which include investigation and analysis of Community Plans, General Plans, Transportation Plans, Land Use Plans, Environmental Documents, and other planning documents. The intent is to take advantage of or develop opportunities for long term right of way acquisition and to work with local and regional agencies to implement corridor preservation measures.

The UTC proposes the number of lanes, the facility type, and the potential right of way width in meters. This width can be variable depending upon the dimensions of cross-sectional elements and specific circumstances which may require narrow widths. Right of way width includes the roadbed, shoulder, clear recovery zone, and clearance from the right of way line to the catch point of the cut or fill slope. Additional right of way may be required for structures, slope modifications and drainage facilities. The UTC number of lanes and facility type for SR-115 is the same as the 2020 Transportation Concept.

LEVEL OF SERVICE (LOS) DEFINITIONS

LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. LOS definitions can generally be categorized as follows:

<u>LOS</u>	<u>D/C</u>	<u>Congestion/Delay</u>	<u>Traffic Description</u>
<i>(Used for conventional highways)</i>			
"B"	0.00-0.45	None	Free to stable flow, light to moderate volumes.
"C"	0.46-0.65	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.66-0.85	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.86-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
F	>1.00	Considerable	Forced or breakdown flow Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.

(Used for two and four lane freeways and expressways)

"A"	<.34	None	Free flow.
"B"	0.35-0.52	None	Free to stable flow, light to moderate volumes.
"C"	0.53-0.69	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.70-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow,

I approve this Transportation Concept Report as the guide for development of State Route 115 over the next 20 years.

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